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ABSTRACT

This resource guide lists instructional materials, supplies, and equipment available for learning to read and write braille. The resources are intended to assist sighted persons interested in learning to transcribe braille; instructors who teach braille; visually impaired persons interested in learning to read and write braille; and family members, friends, and professionals desiring information about braille literacy. The guide is divided into five sections: (1) resources for braille instruction, including braille code books, instruction for transcribers, and instruction for braille readers; (2) books, articles, and videos related to braille literacy and braille instruction; (3) sources of manual and computer-related equipment and accessories for reading and writing braille; (4) supplies for writing and embossing braille; and (5) addresses of sources and suppliers. (JDD)

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Reference Circular

Braille Literacy: Resources for Instruction, Writing Equipment, and Supplies

National Library Service for the Blind and Physically Handicapped

The Library of Congress

Washington, DC 20542

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Date November 1994

No. 94-02

ED 381 923

Introduction

This reference circular cites instructional materials, supplies, and equipment currently available for learning to read and write braille. The resources given are intended to assist sighted persons interested in learning to transcribe braille; instructors who teach braille; visually impaired persons interested in learning to read and write braille; and family members, friends, and professionals desiring information about braille literacy.

Prices are subject to frequent change and should be verified with the supplier before ordering.

Items listed in this circular are not part of the NLS program, and their listing does not imply endorsement.

Complete addresses of sources are listed in Section V, Addresses of Sources.

EC 303869

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I. Resources for Braille Instruction

A. Braille Code Books

Code books are the official documents that set forth rules of usage for or the transcription of the various types of braille (literary, mathematics, computer, and music) in the United States.

Literary Braille Code

English braille, American edition, 1959. Revised edition compiled by the American Association of Workers for the Blind, Association for the Education of the Visually Handicapped, the National Braille Association, and the Braille Authority of North America. Louisville: American Printing House for the Blind, 1972. $8.60 print; $22.50 braille.

English braille, American edition, 1959: changes to the 1972 revision. Adopted by the Braille Authority of North America. Louisville: American Printing House for the Blind, 1980. $.44 print; $1.95 braille.

English braille, American edition, 1959: changes to the 1972 revision. Adopted by the Braille Authority of North America. Louisville: American Printing House for the Blind, 1987. $.72 print; $1.04 braille.

English braille, American edition, 1959: changes to the 1972 revision. Adopted by the Braille Authority of North America. Louisville: American Printing House for the Blind, 1991. $1.10 print; $1.10 braille.

English braille, American edition, 1959: chart of contractions, selected symbols, and simplified rules. Jackson, IL: Illinois Braille and Sight Saving School, 1959. (Available from the American Printing House for the Blind, $2.72 braille.)

Provisional guidelines for literary linear braille format. Compiled by the Braille Authority of North America. Louisville: American Printing House for the Blind, 1987. $1.07 print; $2.72 braille. (Print or braille copies free to Library of Congress-certified literary braille transcribers from the Braille Development Section, National Library Service for the Blind and Physically Handicapped, Library of Congress, Washington, DC 20542.)

Mathematics Braille Code

The Nemeth braille code for mathematics and science notation. Revised edition. Compiled by the American Association of Workers for the Blind, Association for the Education of the Visually Handicapped, the National Braille Association, and the Braille Authority of North America. Louisville: American Printing House for the Blind, 1972. $58.40 print; $182.40 braille. (Print or braille copies free to Library of Congress-certified mathematics transcribers from the Braille Development Section, National Library Service for the Blind and Physically Handicapped, Library of Congress.)

Computer Braille Code

Code for computer braille notation. Compiled by the Braille Authority of North America. Louisville: American Printing House for the Blind, 1987. $5.39 print; $22.44 braille.

Foreign-Language Braille Code

Contracted German: the reformed German braille contractions. By Adam Heinz. Louisville: American Printing House for the Blind, 1972. $10.80 braille.

Music Braille Code

Manual of braille music notation, American edition. Compiled by the Braille Authority of North America. Louisville: American Printing House for the Blind, 1990. $80 print; $80 braille.

Manual of braille music notation, American edition, and 1993 International supplement. Compiled by the Braille Authority of North America, Music Technical Committee. Louisville: American Printing House for the Blind, 1993. $4 print; $4 braille. (Print or braille copies free to Library of Congress-certified music transcribers from the Braille Development Section, National Library Service for the Blind and Physically Handicapped, Library of Congress.)

Textbook Braille Code

Code of braille textbook formats and techniques. Compiled by the American Association of Workers for the Blind, Association of Educators of the Visually Handicapped, National Braille Association, and Braille Authority of North America. Louisville: American Printing House for the Blind, 1977, 1980 braille edition (Appendix E omitted, 1980 BANA changes included), 1980 print edition (BANA changes included). $31 print; $125.76 braille.

B. Instruction for Transcribers

1. Manuals and Guidebooks

Braille letter drill. By H.R. Latimer, revised by Marjorie Hooper. Louisville: American Printing House for the Blind, 1943. $4.96 print; $7.92 print/braille.

Braille transcribing workbook. By Norma L. Schecter. Huntington Beach, CA: Beach Cities Braille Guild, 1992. $7 plus $2 shipping, print. (P.O. Box 712 92648).

Used with lessons in braille transcribing.

The Burns braille transcription dictionary. By Mary F. Burns. New York: American Foundation for the Blind, 1991. $14.95 print.

Codes and calculations. By Mary Ellen Pesavento. Berkeley, CA: Pesavento Press, 1994. (Available from Exceptional Teaching Aids, $75 print.)

Combined with the text for dot writing and includes materials covering all the braille codes.

English braille grade 2 contractions: word signs, short form words, punctuation and composition signs. Louisville: American Printing House for the Blind, 1960. $.63 print; $.27 braille, up to five copies free.

The print version of this guide is also known as the alphabetical index of braille signs.

Handbook for learning to read braille by sight. By Leland Schubert. Louisville: American Printing House for the Blind, 1968. $20.40 print.

Instruction manual for braille transcribing. Revised edition by Maxine Dorf and Barbara Tate. Washington: Library of Congress, 1984. Free to enrolles in the Library of Congress correspondence course. Also available from the American Printing House for the Blind. $6.10 print; $79.15 braille.

Lessons in braille transcribing. By Bernard Krebs. Louisville: American Printing House for the Blind, 1978. $6.50 print; $50.60 braille. Addendum, $1 print; $3.60 braille.

Literary braille practice sentences. By Dorothy Quenten Joseph, revised by Roberta Becker and Phillip Mangold, 1992, 1994. Castro Valley, CA: Exceptional Teaching Aids. $17.95 print plus $4.25 shipping.

New programmed instruction in braille. Revised edition by Samuel C. Ashcroft and others. Nashville: Scalars Publishing, 1991. $42.50 print plus $2.50 shipping.

Transcriber's guide to English braille. By Bernard M. Krebs. Revised 1993 under the auspices of the California Transcribers and Educators of the Visually Handicapped. Los Angeles: Braille Institute of America. $17 print; braille edition in process.

Mathematics Braille

An introduction to braille mathematics. By Helen Roberts, Bernard Krebs, and Barbara Taffet. Washington: Library of Congress, 1978. (Available from the American Printing House for the Blind. $50.85 print; $114.40 braille.)

Learning the Nemeth braille code: a manual for teachers and students. By Ruth H. Craig. Salt Lake City: Brigham Young University Press, 1979. (Available from American Printing House for the Blind. $29.05 print; $47.04 braille.)

Music Braille Code

Introduction to braille music transcription. By Mary Turner De Garmo. Washington: Library of Congress, braille edition 1970, braille addenda 1974 and 1983; print edition (including addenda, 1974; addenda, 1983) 1974. (Available from the American Printing House for the Blind. $75.19 print; $1.83 print addenda for 1983 only; $124.80 braille; $6.80 braille addenda.)

Lessons in braille music. By H.V. Spanner. Louisville: American Printing House for the Blind, 1961. $4.73 print; $43.20 braille; $22 exercises only.

Used in connection with the Revised International Manual of Braille Music Notation, 1956.

Manual of braille music notation American edition. Adopted by Braille Authority of North America. Louisville: American Printing House for the Blind, 1988. $80 print; $80 braille.

2. Correspondence Courses

The Library of Congress offers four courses to individuals interested in transcribing books and other print materials into braille. Interested persons must be citizens or residents of the United States and must have a high school diploma or equivalent. The first course is in **literary braille transcribing**. Successful completion of the course is a prerequisite for other transcribing and proofreading courses and qualifies the individual to transcribe general literary materials. After six months' experience, a literary braille transcriber can enroll in a course in **mathematics braille transcribing, music braille transcribing,** or **sighted proofreading**. A background in music is needed in order to learn music braille. Instructional materials for the courses are provided free. Individuals must purchase equipment and paper; sources for these items are in sections III and IV.

For more information or an application form contact:

Braille Development Section
National Library Service for the Blind
and Physically Handicapped
Library of Congress
Washington, DC 20542
(202) 707-5100

3. University Courses, Competency Testing, and Local Volunteer Classes

Colleges and universities that offer special education or rehabilitation training related to visual impairments provide braille transcribing classes. An annual listing of colleges and universities offering courses in education of visually impaired and deaf-blind students and in orientation and mobility is available from:

Association for Education and Rehabilitation of the Blind
and Visually Impaired
206 North Washington Street, Suite 320
Alexandria, VA 22314
(703) 548-1884
800-365-9753

Individuals who complete transcribing classes through educational institutions are eligible to take the Braille Competency Test to document competency in literary braille. The test is intended primarily for teachers of blind children and adults. The Braille Competency Test is administered by the Braille Development Section listed as item 2 on the previous page.

Local volunteer groups also teach transcribing classes. For a listing of volunteer groups, consult the directory Volunteers Who Produce Books, available free on request from:

Reference Section
National Library Service for the Blind
and Physically Handicapped
Library of Congress
Washington, DC 20542
(202) 707-5100

C. Instruction for Braille Readers (adults and children)

1. Resources for Reading Readiness

Discovering the magic of reading: Elizabeth's story. Louisville: American Printing House for the Blind, 1995. 25-minute video. Request price.

A pre-literate exposure to braille for parents of visually impaired preschoolers.

On the way to literacy: early experiences for visually impaired children. By Josephine M. Stratton and Suzette Wright. Louisville: American Printing House for the Blind, 1991. $15.95 print handbook; $219.95 for the complete braille set.

Consists of a print handbook for parents and teachers and ten tactile-visual storybooks to be read to children from birth to age five. The storybooks are in braille and print and feature tactile and visual illustrations. They provide practice in refining finger and hand skills. The handbook and storybooks can be purchased separately or as a complete package.

Patterns prebraille program. By Hilda Caton, project director; Eleanor Pester; and Eddy Jo Bradley. Louisville: American Printing House for the Blind, 1987. $28.95 braille (complete kit).

A comprehensive, sequential readiness program designed for use with visually impaired children, generally at the preschool or kindergarten level, before they begin the basic braille reading program. The entire kit includes the next three items described below.

Patterns prebraille program: form books. By Ina W. Kurzhals, et al. Louisville: American Printing House for the Blind, 1988. $14.95 braille.

Five books contain embossed shapes or lines that are used to develop the tactual discrimination skills necessary for readiness for braille instruction.

Patterns prebraille program: print instructions for making tactual readiness books. By Kendrick S. Coy. Louisville: American Printing House for the Blind, 1987. $5.95 print.

Furnishes instructions and patterns for creating books to be used in the lessons.

Patterns prebraille program: teacher's manual. By Hilda Caton, project director; Eleanor Pester; and Eddy Jo Bradley. Louisville: American Printing House for the Blind, 1987. $8.95 print.

Touch and tell. By Betty Duncan. Louisville: American Printing House for the Blind, 1969. $34.32.

A three-volume set and a booklet of teacher instructions. Contains embossed illustrations of simple objects and introduces braille dots. Helps a child learn concepts such as left and right, shape, size, number, and tracking across the page. For ages five to six.

2. Manuals and Guidebooks

Literary Braille Code

ABCs of braille. By Bernard Krebs. New York: Jewish Guild for the Blind, 1973. (Available from American Printing House for the Blind, $1.20 standard braille; Braille Institute of America, $67.60 jumbo braille.)

For children ages nine to twelve.

ABCs of braille: teacher's guide. By Bernard Krebs. Louisville: American Printing House for the Blind, 1973. $4.76 braille.

Braille: a different approach. By Jeff Weiss and Johnette Weiss. Louisville: American Printing House for the Blind, 1984. $34.88 braille.

Lessons in grades 1 and 2 braille, a teacher's manual, and one cassette containing writing exercises.

The braille code: a guide to grade three. By Ruth Hayden. Louisville: American Printing House for the Blind, braille edition, 1958; print edition, 1976. $27.53 print; $29.60 braille; on loan from network libraries (BR 1333).

Braille in brief. Jumbo dot edition. By Bernard Krebs. New York: Jewish Guild for the Blind, 1973. (Available from Braille Institute of America, $53.20 print/braille.)

Braille in brief kit. By Bernard Krebs. Louisville: American Printing House for the Blind, 1968. $13.62 braille.

Braille series, revised 1992, Books I–III, program for teaching braille reading to blind adults. Jackson, IL: Illinois Braille and Sight Saving School. Available from American Printing House for the Blind, 1992.

Book I, uncontracted braille, one side, $5.59
Book II, beginning contracted braille, one side, $7.25
Book III, completing contracted braille, interpoint, $8.51

(Print edition of Books I–III is printed parallel to the braille line-for-line and page-for-page.)

Braille series, 1992: practice materials. Jackson, IL: Illinois Braille and Sight Saving School. (Available from American Printing House for the Blind, $2.70–$16.28 braille.)

The practice materials consist of stories in uncontracted to slightly contracted braille and much enlarged to standard braille. The practice materials are sold separately (fifteen stories) and relate to specific pages of the three books in the series.

Discovering braille: a workbook for beginning readers. By Michael Czerwinski. Newark: New Jersey Commission for the Blind and Visually Impaired, 1977. (Available from Essex Chapter, American Red Cross, P.O. Box 838, East Orange, NJ 07019, $30 braille.)

Discovering braille: a workbook of special signs. By Michael Czerwinski. Newark: New Jersey Commission for the Blind and Visually Impaired, 1977. (Available from Essex Chapter, American Red Cross, P.O. Box 838, East Orange, NJ 07019, $10 braille)

Getting in touch with reading. By Margaret M. Smith. Louisville: American Printing House for the Blind, 1978. $30.72 braille. (Jumbo braille edition available from Braille Institute of America.)

Designed for beginning braille readers.

Getting in touch with reading: a fresh approach. By Margaret M. Smith. Louisville: American Printing House for the Blind, 1993.

Getting in touch with reading: grade two. By Margaret M. Smith. Louisville: American Printing House for the Blind, 1981. $68.16 braille.

Getting in touch with reading: teacher's manual. By Margaret M. Smith. Louisville: American Printing House for the Blind, 1978. $1.89 print.

Just enough to know better: a braille primer. By Eileen P. Curran. Boston: National Braille Press, 1988. $15 print/braille.

Key to grade three braille. By Louis Rodenberg. Louisville: American Printing House for the Blind, braille edition 1945; print edition 1977. $18.20 print; $16.00 braille.

Modern methods of teaching braille. By Claudell Stocker and others. Book One: Kansas braille reading-readiness book, student's text (braille only). Book Two: Braille reading simplified, student's text (braille only). Teacher's manual (braille and print). Louisville: American Printing House for the Blind, 1970. Book One $24.96 braille only, Book Two $22.08 braille only, Teacher's Manual $.76 print; $10.56 braille.

Patterns: the primary braille reading program. By Hilda Caton. Louisville: American Printing House for the Blind, 1980, 1982. $64.95–$206.95 (price range for kits for each level).

A braille reading series that picks up where the Patterns prebraille program ends. The program goes through six levels, from readiness level to the third reader level. Each level consists of pupil and teacher texts, worksheets, and post tests.

Patterns library series. By Eleanor Pester and others. Louisville: American Printing House for the Blind, 1980. $49.95–$85.95 braille kits.

Practice books designed to follow each level of the Patterns program. Each book is color-coded by level for easy identification. Each kit contains 22–27 books.

Read again: a braille program for adventitiously blinded print readers. Nine levels. By Hilda Caton, Eleanor Pester, and Eddy Jo Bradley. Louisville: American Printing House for the Blind, 1990. Complete kit $106.20 print; $171.43 braille. (Sections of the program may be ordered separately.)

For individuals who have been print readers but now need to use braille as their reading medium.

Read again: a braille program for adventitiously blinded print readers, teacher's edition. By Hilda Caton, Eleanor Pester, and Eddy Jo Bradley. Louisville: American Printing House for the Blind, 1990. $29.81 print; $99.33 braille.

Teaching the braille slate. By Phillip Mangold. Castro Valley, CA: Exceptional Teaching Aids, 1993. $15 print.

A manual designed for teaching mastery of the slate and stylus.

The world at my fingertips. By Norma L. Schecter. Huntington Beach, CA: Beach Cities Braille Guild, 1985. Braille with facing print pages. Free to rehabilitation counselors and other agencies working with blind adults. (P.O. Box 712 92648).

A jumbo-braille primer intended for blind adults with loss of tactile sensitivity.

Music Braille Code

Braille music chart. New revised edition. Compiled by Edward W. Jenkins. Louisville: American Printing House for the Blind, 1960. $2.33 print; $12.32 braille.

Dictionary of braille music signs. By Bettye Krolick. Washington: Library of Congress, Music Section, 1979. (Available on free loan from NLS Music Section)

How to read braille music. By Bettye Krolick. Champaign, IL: Stipes Publishing Company, 1975. $2.50 print; (Braille available from National Braille Association $7.48 for individuals, $19.90 for agencies, schools, libraries).

Primer of braille music. Revised edition. Compiled by Edward W. Jenkins. Louisville: American Printing House for the Blind, 1960 with 1971 addendum. $24.95 print; $17.28 braille.

Revised international manual of braille music notation, 1956 (American edition), Part I, Western music. Louisville: American Printing House for the Blind, 1961.

Foreign-Language Braille Code

Manual for Spanish braille. By D. Goodlin. Allentown, PA: Lehigh Valley Braille Guild, 1978. (Available from the American Printing House for the Blind, $23.85 braille.)

3. Correspondence Courses

The Hadley School for the Blind offers several tuition-free home study courses to help newly blinded persons acquire skills in communication, with a special emphasis on braille. Academic credits are given for some courses. Courses are available in braille and on cassette.

Braille Placement. 1 lesson.

Assesses the competency of a student with previous braille experience.

Braille Reading I. 24 lessons.

Braille Reading II. 28 lessons.

Braille Reading Review. 5 lessons.

Braille Writing. 10 lessons.

Essentials of Nemeth. 9 reading exercises, 9 writing exercises.

Grade 3 Braille. 35 lessons.

Highly contracted braille for note taking and speed writing.

Music Notation. 28 lessons.

Instruction in reading the Braille Music code.

Rapid Braille Reading. 9 lessons.

Techniques to increase speed and comprehension in reading braille. Good grade 2 braille-reading ability required.

Relevant Braille. 5 lessons.

How to read and write grade 1 braille for taking personal notes and telephone numbers.

To enroll or for more information contact:

Hadley School for the Blind
700 Elm Street
Winnetka, IL 60093
800-323-4238
(708) 446-8111

4. Local Training Resources

Classes or personal assistance for learning to read and write braille are offered by most state commissions for the blind and by lighthouses and other rehabilitation agencies. A local library or telephone operator can provide the telephone number of the nearest agency.

II. Books, Articles, and Videos Related to Braille Literacy and Braille Instruction

Braille literacy: issues for blind persons, families, professionals, and producers of braille. By Susan J. Spungin. New York: American Foundation for the Blind, 1990. 12p.

Determining the reading medium for students with visual impairment: a diagnostic teaching approach. By Alan J. Koenig and M. Cay Holbrook. Journal of visual impairment and blindness, v. 83, June 1989: 296-302.

Determining the reading medium for visually impaired students via diagnostic teaching. By Alan J. Koenig and M. Cay Holbrook. Journal of visual impairment and blindness, v. 85, Feb. 1991: 61-68.

Handbook for itinerant and resource teachers of blind and visually impaired students. By Doris M. Willoughby and Sharon L.M. Duffy. Baltimore: National Federation of the Blind, 1989: 533p.

Library of Congress certification in braille transcribing through distance learning Houston, TX: Region IV Education Service Center, 1994. 21 videotapes. $630.

A parent's guide to the slate and stylus. By Barbara Cheadle. Future reflections, v. 13, Fall 1994: 6-14.

Prebraille readiness. Future reflections, v. 10, winter-spring 1991: 13-16.

Print and braille literacy: selecting appropriate learning media. By Hilda Caton. Louisville: American Printing House for the Blind, 1991.

Print...braille...literacy. Journal of visual impairment and blindness, v. 83, June 1989: 288-313.

A process approach to teaching braille writing at the primary level. By Anna M. Swenson. Journal of visual impairment and blindness, v. 85, May 1991: 217-221.

Specifications for selecting a vocabulary and teaching method for beginning braille readers. By Hilda Caton, Eleanor Pester, and Sharon Goldblatt-Bensinger. Louisville: University of Louisville and American Printing House for the Blind, 1979.

Teaching braille: a creative and practical art. By Ruth Dean Zulli. Dialogue, v. 32, summer 1993: 14-18.

Understanding braille literacy. New York: American Foundation for the Blind, 1993. 25-minute video. $39.95 plus $4.50 shipping.

The war of the dots. By Robert B. Irwin. New York: American Foundation for the Blind, 1970 56p.

III. Sources of Equipment and Accessories for Reading and Writing Braille

A. Manual Equipment

1. Braillewriters and Accessories

Perkins Brailler; standard manual $595; electric $855
Perkins Unimanual Brailler (for persons limited to the use of one hand) $645
Perkins large-cell Brailler; manual, jumbo dot $685; electric $930
Extension keys for Perkins Brailler $35.50
Narrow-paper adapter for Perkins Brailler $14.75
Dymo tape holder $23.75
Line scale $17.50

American Printing House for the Blind (quota funds only)
Braille Institute of America
Howe Press of Perkins School for the Blind

TAJ Braille Typewriter; portable, lightweight, similar to Perkins braillewriter.

Maxi Aids, $475, plus $10 shipping/handling

2. Slates and Styluses

A wide assortment of slates and styluses is produced for a variety of uses. Slates generally come in one-line, four-line, six-line, and eight-line models and vary in the number of cells per line. Styles include: E-Z Read slate, pocket slate, desk slate, playing-card slate, correction slate (for transcribers), jiffy slate, cassette-labeling slate, loose-leaf pocket-notebook slate.

Although the standard stylus accompanies all slates, various additional styluses are available. Examples include: reversible stylus, regular stylus, pencil stylus, and flat stylus. Slates and styluses are also available for jumbo braille.

American Printing House for the Blind
Braille Institute of America
Howe Press of Perkins School for the Blind
Independent Living Aids
LS&S Group
Maxi Aids
New York Lighthouse for the Blind
Royal National Institute for the Blind

B. Computer-Related Equipment

1. Braille Displays and Notetakers

Braille displays provide braille access to the information on a computer screen. They are commonly available in 20-, 40-, or 80-character braille-cell configurations of six or eight dots each. Some displays are portable and battery-powered.

Braille notetakers are portable devices that allow a user to take notes by inputting standard braille characters using a braille-style keyboard. Some of these devices also allow users interaction with the text through synthesized speech, a braille display, or both. Some allow the text to be edited and translated from the braille characters to their print equivalents.

ALVA Braille Terminal
A 43- or 83-cell, eight-dot braille display with 40 or 80 cells for reading and three cells for status information. Can be connected to any MS-DOS computer by means of the parallel printer port. Available in portable and desktop models.

HumanWare, Inc., $4,995–$14,495

Braille Lite
An 18-cell, eight-dot refreshable braille display with braille keyboard and command structure. Also features a fully adjustable speech synthesizer and offers an integrated combination of speech and braille output. Stores up to 800 pages of braille in up to 41 files and features a parallel printer port.

Blazie Engineering, $3,395

BrailleMate
A braille notetaker. Has a braille-style keyboard, one eight-dot braille cell, and an optional built-in speech synthesizer for use with compatible speech software on a PC. Combined with a Navigator, it retains its features in a 20-, 40-, or 80-character refreshable braille format.

New York Lighthouse for the Blind, B90450, $1,595
TeleSensory, DM1A-01, $1,595

Braille-n-Print
Connects to a printer and produces a braille and print copy of documents created on a modified Perkins Brailler. Has 22K of memory allowing up to four files to be stored and printed at a later time. Comes in two models: the Slimline snaps to the bottom of a Perkins, and the Mark 2M is for multi-user settings.

HumanWare, Inc., $995
LS&S Group, $995

Braille 'n Speak
Converts data entered through a braille-style keyboard into speech. It features a grade 2 braille-to-print "back translator." Can be connected to a computer or modem and can also be configured with an external disk drive. Available in eleven languages. Two models.

Access Technologies, Inc., $1,295, $1,299
Blazie Engineering, $1,299, $1,399
LS&S, $995, $1,299
New York Lighthouse for the Blind

BRAILLEX 2D
An 80-cell horizontal braille display with four status cells. Can be connected to the IBM-PC XT, AT, PS/2, and compatibles. Also has a vertical display with 44 rows of four dots.

J. Wood and Associates, $16,500

DAVID
A notebook computer designed around a 386SL processor. Includes serial and parallel interfaces; a 40-cell, eight-dot braille text display; and a four-braille-cell status/attribute display; also features Optical Sensor Cursor Routing (OSCR) and a memory-resident braille translator that translates screen contents or entire files into grade 2 braille.

AccessAbility Technologies, Inc., $15,000
LS&S Group, Inc., $14,975
Maxi Aids, $12,750

DM 80/OSCR & FM 80
A computer access system. Optical Sensor Cursor Routing (OSCR) monitors the user's hand position above the braille display, enabling the control of various functions. Main display features 80 braille cells and four status elements, six pre-defined mode switches, and user-definable function keys for macros and overlays.

AccessAbility Technologies, Inc., $25,000

INKA
A braille access device (Integrated Keyboard Access) with a 40-cell, four-character status braille display using an updated version of the braille cell and OSCR technology. Also features an optical sensor pointer which acts like a "braille mouse." Available in two versions: standard and pro.

AccessAbility Technologies, $7,875, $9,975

KTS Braille Display
A 40- or 80-cell, six- or eight-dot braille display; four-cell status line available. Has hardware interfaces for PC, MicroChannel, and Toshiba systems.

American Thermoform Corporation, M6/K-0040, $6,395; M6/K-0080, $14,995

MiniBraille
A 22-cell braille display that has 20 cells for text and attributes and two cells for status information. Can select for either six- or eight-dot use. Connects to the serial port of a PC.

HumanWare, Inc., $3,450

MPRINT
A circuit board that replaces the bottom of a Perkins Brailler. Translates characters into corresponding print and relays that information to a printer. Print and braille copies are then produced simultaneously.

TeleSensory, MP1A/MP16001, $995

Navigator 80
Translates ASCII text on the computer screen to grade 2 braille on the braille display. Is available in 80-character braille cells of eight dots. Works with desktop MS-DOS computers. Features separate buttons for cursor and display movement. Allows six keys of a standard PC keyboard to act as braille keyboard. Can be used with menu bars, mouse pointers, and multicolor screens.
TeleSensory, HB1B-808(D), $12,995

NOTEX
Allows the user to take notes in braille and to save, edit, and review the text on the 24- or 40-cell braille display. When connected to a PC, NOTEX with its PC-Link software becomes a braille output unit.
J. Wood and Associates, $11,995

Power Braille 40
Portable braille display that operates with notebook and desktop computers to translate screen information into 40-cell eight-dot refreshable braille. Features touch cursor routing system, a tactile ruler, and separate buttons for cursor and display movement. Battery powered.
TeleSensory, PB1a, request price

2. Braille Embossers

Braille Blazer
Embosses at 15 characters per second in either six- or eight-dot braille. The voice of the built-in speech synthesizer can be used to configure the Blazer or can stand alone to make the computer talk. The embosser is supported by most popular screen-reading packages.
Blazie Engineering, $1,695, $1,745
Henter-Joyce, $1,695
LS&S, $2,195

Braille BookMaker
An interpoint desktop embosser. Runs at 80 characters per second and can be used with various paper stock. Commands can be issued from a calculator-style keypad and confirmed by tones.

Blazie Engineering, $10,610
Enabling Technologies Company, $10,500, $8,500

Braille Express
An upgraded version of the braille BookMaker operating at 150 characters per second.

Blazie Engineering, $19,610
Enabling Technologies Company, $19,500

Braillo Comet
Upgraded version of the Braillo 90. Embosses at 50 and 75 characters per second. Includes graphics access and serial and parallel ports.

American Thermoform Corporation, M4/0-0060, $3,795
LS&S, $4,295
Maxi Aids, $4,295

Braillo 200
Embosses interpoint and single-side braille. Produces 600 pages an hour utilizing standard continuous pinfeed fanfold paper.

American Thermoform Corporation, M4/0-0200, $36,995

Everest DT
An interpoint embosser. Operates at 100 characters per second and has a built-in Duxbury grade 2 braille translator.

J. Wood and Associates, $4,500
Maxi Aids, $4,900
TeleSensory, EV2A, $5,995

Index
Produces either six- or eight-dot braille at 50 characters per second. Features include parallel and serial interface and a 30k print-and-copy buffer.

Access Technologies, Inc., $2,995
J. Wood and Associates, $2,995

Juliet
An interpoint embosser. Runs at 40 characters per second. Can handle inexpensive 15-inch-wide accounting stock. Has an impact control to produce braille on 100-pound paper.

Blazie Engineering, $4,105, $4,405
Enabling Technologies Company, $3,995

Marathon
A high-volume production embosser. Runs at 200 characters per second. Equipped with both serial and parallel ports to allow interface with virtually any computer system or host device.

Enabling Technologies Company, $12,995

Mountbatten Brailler
Can be used as an embosser, a braille writer, a notetaker that can type braille directly into an electronic memory rather than on paper, a forward translation system that translates print into braille, and a back-translation system for the braillist who wants a print copy. Can be driven by an external keyboard for one-handed use.

HumanWare, Inc., $2,495–$3,295

Ohtsuki BT-5000
Produces braille and print on the same page simultaneously. Also includes braille graphics and braille-only or print-only options. Compatible with most microcomputers, voice synthesizers, and popular software.

American Thermoform Corporation, M2/0-5000, $4,695
LS&S Group, $4,695
Maxi Aids, $4,695

Porta-Thiel
Embosses six- and eight-dot braille on all sizes and types of paper, on single sheets, continuous forms, and plastic and magazine sheets. Uses a built-in speech synthesizer to say when paper is out and waits for more to be inserted. Has both a serial and a parallel interface. Can be used with Braille 'n Speak or other PC. Portable.

Blazie Engineering, $1,895
LS&S Group, call for pricing

Romeo
Embosses single sided at 20 or 40 characters per second.

Enabling Technologies Company, RB-20 $2,995, RB-40 $3,795
Henter-Joyce, $2,995, $3,795
HumanWare, Inc., $2,995, $3,795

Thiel Beta-X3
A high-speed embosser used in braille-production facilities, schools, and offices. Can create grade 1 braille, grade 2 braille, Nemeth Code, and graphics. Works with all current braille translation software.

Blazie Engineering, call for pricing

Thomas
A single-sided model of the Juliet. Operates at 40 characters per second.

Enabling Technologies Company, $2,995.

VersaPoint
Embosses text or graphics at 40 characters per second in either six- or eight-dot braille. Adjusts to different paper widths and weights.

Raised Dot Computing, Inc., $3,795

TeleSensory, BP1D, BP1D/90827-004, BP1D/90827-011, $3795–$4,290

3. Braille Transcription Software

Software for braille transcription includes automated translators that convert letters, numbers, and other standard characters into contracted braille, and direct-input programs that require a knowledge of braille codes and a one-for-one input of each character to be output in braille.

AutoBraille
Uses the same translation rules and algorithm as TurboBraille, but lacks its formatting language. Available as a stand-alone program or in combination with TurboBraille.

KANSYS, Inc., $95, $295

BEX

For the Apple II series. Creates large-print output on the screen. Translates print files to grade 1 or grade 2 braille and supports braille output to virtually every braille embosser on the market currently. Can back translate grade 2 braille files to print.

Blazie Engineering, $450
Carolyn's, BEX31, $439.95
LS&S Group, $450
Maxi Aids, $450
Raised Dot Computing, Inc., $450

Braille-Talk

Allows standard text files to be translated into grade 1 or grade 2 braille for embossing. Produces tables and charts using columns. Supports all standard and parallel braillers and many speech synthesizers.

Carolyn's, GW8220002, $189
Exceptional Teaching Aids, BT1, $195
GW Micro, 8220-001, $195
LS&S Group, $195
Maxi Aids, $195

Duxbury Braille Translator

For the Macintosh, IBM PC, and other MS-DOS computers. DUXWP works with WordPerfect 5.0 and 5.1 files. Can produce braille from print or print from braille. Features include automated formatting of documents from virtually any word processor, with textbook layout according to Library of Congress standards and embedded grade 1 foreign languages, and compatibility with braillling devices and accessibility aids such as speech synthesizers and screen enlargement programs.

Access Technologies, Inc., $475
Blazie Engineering, $495
Duxbury Systems, Inc., $295, $495
Enabling Technologies Company, $495
Henter-Joyce, $495

J. Wood and Associates, $495
LS&S Group, $495
Maxi Aids, $495
TeleSensory, 90827-004, 90827-007, $495

Edgar
MS-DOS compatible, direct input software.
Duxbury Systems, $295

ED-IT PC
Direct input software that operates under IBM Windows.
Intelligent Information Technologies, $179

E-Z Braille
Reads, reformats, and translates a document into braille. Recognizes paragraphs, tables, lists, and headings. Requires any IBM PC or PS2 computer or compatible and supports WordPerfect versions 4.2, 5.0, and 5.1.
LS&S Group, $249.95

Hot Dots
Allows user to translate standard print-text files to grade 1 or grade 2 braille and output the braille files to a variety of braille embossers. Includes a print formatter that interprets imbedded format commands to create formatted text files, and a speech interface compatible with most IBM speech synthesizers. Runs on any MS-DOS computer that has at least 256k of memory.
Access Technologies, Inc., $350
Blazie Engineering, $360
Carolyn's, HOTD31, $329.95
LS&S Group, $350
Raised Dot Computing, Inc., $350
TeleSensory, 90827-011, $350

MegaDots
Braille files can be viewed on the screen in one of four ways: braille dots, ASCII characters, line-by-line back-translation into print, or "pseudo text" (braille contractions "jammed" together on-screen). Requires an MS-DOS or IBM-compatible computer and a hard disk.

Access Technologies, Inc., $450
Blazie Engineering, $495
Enabling Technologies Company, $500
LS&S Group, 312-MD10, $500
Maxi Aids, $500
Raised Dot Computing, Inc., $500

Micro Braille
Direct input software that allows user to see full screen of braille characters.

Micro Engineering, $155

NFBTRANS
A text-to-braille software program. Requires an IBM or compatible computer using an MS-DOS operating system, a brailling device, and word-processing software.

Roudley Associates, Inc., $395

PC Braille
For the IBM PC, XT, AT, PS/2, and compatibles. Produces grade 1, grade 2, or the newly adopted computer braille (known as grade 0). Translates by rule, not by dictionary search. Works with text editors and most word processors and can format the text for printing or for brailling. Supports all commercial braille embossers operating through a communications or centronix port.

Arts Computer Products, Inc., $495, $1495

Pokadot
A braille text editor for direct input. Compatible with Apple IIe, Apple II Plus, Apple IIc computers. Not compatible with Apple IIg.

National Braille Association, $10 members, $20 non-members

Ransley Braille Interface
Allows a person who does not know braille to produce automatically formatted grade 2 braille. Box connects any standard computer or computerized source to any standard braille embosser.

HumanWare, Inc., $995

TranSend
Software used with the Thomas braille embosser. Translates text into print or braille or both on the same page, line-for-line. It allows a user who does not know braille to produce a braille document by proofreading the accompanying print. Can provide proper braille spacing with 14-point print size.

Enabling Technologies Company, $4,600

TurboBraille
Translates documents into standard English braille for embossing or downloading. Can support most features of grade 3 braille in addition to grade 1, grade 2, and computer braille. Accepts WordPerfect, WordStar, and ASCII files. Has an interactive mode, a command-line mode, and complete on-line documentation.

Enabling Technologies Company, $295

KANSYS, Inc., $295

IV. Supplies for Writing and Embossing Braille

Braille Writing Paper

Braille writing paper is available in a variety of sizes to accommodate the wide array of braille writing and embossing equipment. Sizes include 3" x 5", 3-½" x 6-⅛", 5" x 8" for looseleaf binders, 5-½" x 11" for Mini Pitch Brailler, 8-½" x 11", 9" x 12", and 11" x 11-½". Other sizes are also available. Braille writing paper is available in two grades (heavy and light). Heavy grade provides more durable dots; light grade is easier to emboss by slate and stylus. Braille paper is available in buff, white, manila, or brown glazed finish and may be ordered unpunched or punched for 3, 6, or 19 holes. Paper is packaged in different quantities. (Not all sources stock all sizes.)

American Printing House for the Blind
Blazie Engineering
Braille Institute of America
Howe Press of Perkins School for the Blind
Independent Living Aids
LS&S Group
Maxi Aids
Royal National Institute for the Blind

Braille (Ohtsuki) Paper

Heavy-grade manila paper specially developed for the Ohtsuki BT-5000 embosser. It can also be used on vacuum form machines.

American Printing House for the Blind
American Thermoform Corporation
Braille Institute of America
Maxi Aids

Brailon

Brailon is a plastic-like paper developed for use with the thermoform machine. It can be used in a braillewriter or with a slate and stylus. Available in heavy and light grades and in several sizes including 8-½" x 11" and 11" x 11-½".

American Thermoform Corporation

Computer Braille Paper

Tractor fed, available in sizes 8-½" x 11", 11" x 11-½", 14-⅞" x 11", and 6½"x 6" continuous cards. Comes in heavy and light grades.

American Printing House for the Blind
American Thermoform Corporation
Braille Institute of America
Howe Press of Perkins School for the Blind
LS&S Group
Maxi Aids
National Federation of the Blind
Royal National Institute for the Blind

Other Supplies

Binders

An assortment of notebooks and binders suitable for storing various sizes of braille paper and cards: 3-ring pocket notebook; 6-ring pocket notebook; 3-ring notebook 8-½" x 11" and 11" x 11-½"; 19-ring looseleaf binder; 19-ring Krebs binders for 11" x 11-½" paper in three paper capacities; spiral-bound pocket notebook; plastic and cardboard covers cut to size and punched for plastic comb binding.

American Printing House for the Blind
American Thermoform Corporation
General Binding Corporation
Howe Press of Perkins School for the Blind
Independent Living Aids
LS&S Group
Maxi Aids
Royal National Institute for the Blind
Southwest Plastic Binding Company

Impresser
An embosser for making braille business cards. A hand-held device that allows one to emboss up to four lines of braille, 13 cells each on a business card by squeezing the handle. The die for each Impresser must be custom made.

American Printing House for the Blind

Labeling Tape
Labeling materials include Dymo braille tape, Teflon skied tape, aluminum tape, clear cassette labels, braillabels (8-½"x 11" adhesive-back sheets that can be cut to size), perma clear adhesive back labels, embossables (for use with braille embossers, tractor fed, 8-½" x 11", adhesive back), and 2" x 5" plastic clear labels.

American Printing House for the Blind
Braille Institute of America
Howe Press of Perkins School for the Blind
Independent Living Aids
Label Specialties
LS&S Group
Maxi Aids
New York Lighthouse for the Blind

3M Braille Labeler
Embosses braille on vinyl or magnetic tape. Dial includes complete braille alphabet, some contractions, and punctuation. Holds ½" and ⅜" width tape.

Braille Institute of America
Independent Living Aids
LS&S Group
Maxi Aids
New York Lighthouse for the Blind

V. Addresses of Sources and Suppliers

Access Technologies, Inc.
P.O. Box 2101
Decatur, AL 35602
(205) 351-1002
800-842-1308

AccessAbility Technologies, Inc.
BAUM USA
17525 Ventura Boulevard
Suite #303
Encino, CA 91316-3843
(818) 981-2253
(818) 981-7124 fax

AI Squared
P.O. Box 669
Manchester Center, VT 05255-0669
(802) 362-3612
(802) 362-1670 fax

American Foundation for the Blind
see **New York Lighthouse for the Blind**

American Printing House for the Blind
1839 Frankfort Avenue
Louisville, KY 40206
(502) 895-2405
800-223-1839
(502) 895-1509 fax

American Thermoform Corporation
2311 Travers Avenue
City of Commerce, CA 90040
(213) 723-9021
800-331-3676
(213) 728-8877 fax

Arts Computer Products, Inc.
33 Richdale Avenue
P.O. Box 604
Cambridge, MA 02140
(617) 547-5320
800-343-0095
(617) 547-5597 fax

Association for Education and Rehabilitation of the Blind and Visually Impaired
206 North Washington Street
Suite 320
Alexandria, VA 22314
(703) 548-1884
800-365-9753

Beach Cities Braille Guild
P.O. Box 712
Hunington Beach, CA 92648
(714) 536-9666

Berkeley Systems, Inc.
2095 Rose Street
Berkeley, CA 94709
(510) 540-5535
(510) 540-5115 fax

Blazie Engineering
105 East Jarrettsville Road
Unit D
Forest Hill, MD 21050
(410) 893-9333
(410) 836-5040 fax

Braille Institute of America
741 North Vermont Avenue
Los Angeles, CA 90029
(213) 663-1111
(213) 660-3880
(213) 663-0867 fax

Carolyn's
P.O. Box 14577
Bradenton, FL 34280-4577
(813) 795-8932
800-648-2266
(813) 761-8306 fax

Duxbury Systems
435 King Street
P.O. Box 1504
Littleton, MA 01460
(508) 486-9766
(508) 486-9712 fax

Enabling Technologies Company
3102 SE Jay Street
Stuart, FL 34997
(407) 283-4817
800-777-3687
(407) 220-2920 fax

Essex Chapter
American Red Cross
P.O. Box 838
East Orange, NJ 07019
(201) 676-0800

Exceptional Teaching Aids
20102 Woodbine Avenue
Castro Valley, CA 94546
(510) 582-4859
800-549-6999

General Binding Corporation
One GBC Plaza
Northbrook, IL 60062
(708) 272-3700
800-723-1500

GW Micro
310 Racquet Drive
Fort Wayne, IN 46825
(219) 483-3625
(219) 484-2510 fax

Hadley School for the Blind
700 Elm Street
Winnetka, IL 60093
(708) 446-8111
800-323-4238

Henter-Joyce
2100 62nd Avenue North
St. Petersburg, FL 33702
(813) 528-8900
800-336-5658
(813) 528-8901 fax

Howe Press
Perkins School for the Blind
175 North Beacon Street
Watertown, MA 02172-9982
(617) 924-3490
(617) 926-2027 fax

HumanWare, Inc.
6245 King Road
Loomis, CA 95650
(916) 652-7253
800-722-3393
(916) 652-7296 fax

Independent Living Aids, Inc.
27 East Mall
Plainview, NY 11803
800-537-2118
(516) 752-3135 fax

Intelligent Information Technologies Corporation
P.O. Box 5002
Champaign, IL 61820
(217) 337-7058

J. Wood and Associates
P.O. Box 180
Fairfax Station, VA 22039-9180
(703) 715-6072
(703) 803-9142 fax

KANSYS, Inc.
1016 Ohio Street
Lawrence, KS 66044
(913) 843-0351
800-279-4880

Label Specialties
8014 Vinecrest Avenue
Lyndon, KY 40222
(502) 425-3136
(502) 425-3917 fax

LS&S Group
P.O. Box 673
Northbrook, IL 60065
(708) 498-9777
800-468-4789
(708) 498-1482 fax

Maxi Aids
42 Executive Boulevard
P.O. Box 3209
Farmingdale, NY 11735
(516) 752-0521
800-522-6294
(516) 752-0689 fax

Micro Engineering
5714 Skyloft Drive
Riverside, CA 92509-6338
(909) 685-6338

National Braille Association
3 Townline Circle
Rochester, NY 14623-2513
(716) 427-8260
(716) 427-0263 fax

National Braille Press
88 St. Stephen Street
Boston, MA 02115
(617) 266-6160
(617) 437-0456 fax

National Federation of the Blind
1800 Johnson Street
Baltimore, MD 21230
(410) 659-9314

New York Lighthouse for the Blind
For mail order:
Low Vision Products
36-20 Northern Boulevard
Long Island City, NY 11101
800-453-4923
For retail:
Spectrum, the Lighthouse Store
111 East 59th Street
New York, NY 10022
(212) 821-9384
(212) 821-9707 fax

Raised Dot Computing, Inc.
408 South Baldwin
Madison, WI 53703
(608) 257-9595
800-347-9594
(608) 241-2498 fax

Region IV Education Service Center
7145 West Tidwell
Houston, TX 77092-2096
(713) 744-6368

Roudley Associates, Inc.
P.O. Box 608
Owings Mills, MD 21117
(410) 363-7049
800-333-7049
(410) 581-7064 fax

Royal National Institute for the Blind
224 Great Portland Street
London W1N 6AA
ENGLAND
01-388-1266 (telephone)

Southwest Plastic Binding Co.
109 Millwell Drive
St. Louis, MO 63043
(314) 739-4400
800-325-3628

Stipes Publishing Company
10-12 Chester Avenue
Champaign, IL 61820

TeleSensory
455 North Bernardo Avenue
P.O. Box 7455
Mountain View, CA 94039-7455
(415) 960-0920
800-227-8418
(415) 969-9064 fax

Compiled by
Freddie L. Peaco
Reference Section
November 1994

The reference circulars listed below are available free on request from:

Reference Section
National Library Service for the Blind
and Physically Handicapped
Library of Congress
Washington, DC 20542

Reference Circulars

Assistive Devices for Reading, 1993

Bibles, Other Scriptures, Liturgies, and Hymnals in Special Media, 1993

Blindness and Visual Impairments: National Information and Advocacy Organizations, 1990

Braille Literacy: Resources for Instruction, Writing Equipment, and Supplies, 1994

Building a Library Collection on Blindness and Physical Disabilities: Basic Materials and Resources, 1990

Deaf-Blindness: National Organizations and Resources, 1993

Guide to Spoken-Word Recordings: Foreign-Language Instruction and Literature, 1988

Guide to Spoken-Word Recordings: Popular Literature, 1987

Information for Handicapped Travelers, 1987

Learning Disabilities: National Information and Advocacy Organizations, 1990

☆ U.S. GOVERNMENT PRINTING OFFICE: 1995 387-838/00027

Parents' Guide to the Development of Preschool Children with Disabilities: Resources and Services, 1992

Physical Disabilities: National Organizations and Resources, 1994

Reference Books in Special Media, 1982; Addendum, 1987

Sports, Outdoor Recreation, and Games for Visually and Physically Impaired Individuals, 1991

Bibliographies

A series of bibliographies is also published by the Reference Section. The following titles are available free on request:

Accessibility: A Selective Bibliography, 1994

Assistive Technology: A Selective Bibliography, 1992

Disability Awareness and Changing Attitudes, 1991

Library and Information Services to Persons with Disabilities, 1989